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December 9, 2014

Via Electronic Filing

Ms. Barcy McNeal Public Utilities Commission of Ohio Administration/Docketing 180 East Broad Street, 11<sup>th</sup> Floor Columbus, OH 43215-3793

Re: Oregon Clean Energy, LLC OPSB Case Nos. 12-2959-EL-BGN and 14-1396-EL-BGA

Dear Ms. McNeal:

This letter will provide information on the progress of the 799-megawatt natural gas combined cycle plant that the Ohio Power Siting Board ("OPSB") approved in Case No. 12-2959-EL-BGN and as amended in Case No. 14-1396-EL-BGA.

There were a number of industry articles about the closing of the \$850 million financing which occurred on November 14, 2014. Attached are copies of the following press releases and articles:

- Attachment 1 Energy Investors Funds and iSquared Capital dated November 17, 2014
- Attachment 2 SparkSpead dated December 16, 2014
- Attachment 3 Power Finance and Risk dated November 24, 2015
- Attachment 4 Black & Veatch news release dated November 21, 2014

In addition, two progress reports are attached, one from Black & Veatch for November 2014 (Attachment 5) which, among other information, contains photos on pages 9 and 10 of the current construction. A Siemens third Monthly Progress Report for November 2014 is attached as Attachment 6.

Finally, a schedule of the milestones in the construction of the Oregon Clean Energy Center is also attached (Attachment 7) showing that construction on site began in November 2014 and substantial completion is expected in June 2017.

Additional updates are planned in the future. If you have any questions please call at the number listed above.

Sincerely,

Sally W. Bloomfield

Attachments

Cc: Grant Zeto (w/Attachments)

Sally N Broomfule

Chris Cunningham (w/Attachments)





#### FOR IMMEDIATE RELEASE

## ENERGY INVESTORS FUNDS AND I SQUARED CAPITAL ANNOUNCE EQUITY PARTNERSHIP TO CONSTRUCT 869 MW OREGON CLEAN ENERGY CENTER

**NEW YORK, NY – NOVEMBER 17, 2014:** Energy Investors Funds ("EIF"), an energy-focused private equity firm, and I Squared Capital, an independent global infrastructure investment manager, announced that they have formed an equity partnership to construct the Oregon Clean Energy Center ("OCEC"), a greenfield 869 megawatt combined-cycle natural-gas fired generation facility to be located in Oregon, Ohio. EIF, through one of its private equity funds, EIF United States Power Fund IV, L.P. ("USPF IV") and I Squared Capital, through its ISQ Global Infrastructure Fund, are equal partners in the project.

OCEC will use two Siemens SGT6-8000H gas turbines and one steam turbine, which are the most advanced and efficient turbines on the market. The plant's output will play a critical role in the Pennsylvania-New Jersey-Maryland ("PJM") wholesale electricity market, which is slated for 12,000 MW of coal plant retirements in the near future. The plant's construction will have a positive impact on the community, creating approximately 500 jobs during construction, and approximately 25 jobs on-site after completion. The plant is expected to begin commercial operations by July 2017.

"We're happy to have closed on our equity partnership and debt financing, which will allow OCEC to begin construction," said Lucas Missong, Senior Vice President at EIF. "This project will provide efficient electricity for a marketplace where new, cleaner generation is sorely needed. We're pleased to partner with I Squared Capital on this project and look forward to working with them throughout the construction process."

"I Squared Capital's investment in OCEC is consistent with our strategy of investing in clean, efficient generation that will benefit from the new paradigm, arising from abundant natural gas and environmental regulations, in the U.S. electricity market." said Adil Rahmathulla, Partner at I Squared Capital. "OCEC will serve a growing customer base in the world's largest wholesale electricity market while reducing emissions. We are pleased to partner with EIF and look forward to a successful collaboration."

OCEC was approved by the Ohio Power Siting Board in May 2013 and has been developed by North America Project Development, LLC ("NAPD"), utilizing loans from USPF IV. NAPD will retain an interest in OCEC going forward.

"We look forward to having EIF and I Squared Capital advance OCEC through a construction phase, and on to commercial operations," said William J. Martin, Managing Partner of NAPD.

"Both firms are name-brand partners with the resources and expertise to see this project through completion."

BNP Paribas acted as the exclusive financial advisor to EIF and OCEC on this transaction. The law firm of Orrick, Herrington & Sutcliffe represented OCE and EIF in the development, commodity hedging and debt financing of the project, and in raising the necessary equity financing. The law firm of Davis Polk advised I Squared Capital on its equity investment in OCEC. The law firm of King & Spalding advised OCEC in the development of the engineering, procurement and construction contract for the project.

#### **About Energy Investors Funds**

EIF was founded in 1987 as one of the first private equity fund managers focused on the independent power industry. EIF's investment strategy is to create diversified portfolios of energy infrastructure-related assets across the power generation, transmission, and midstream sectors that are expected to provide superior risk-adjusted equity returns with current cash flow and capital appreciation. EIF has raised over \$5 billion in equity capital and currently manages multiple private equity funds from its offices in Boston, New York, and San Francisco. In October 2014, Ares Management, L.P. (NYSE: ARES) announced that it had signed a definitive agreement to acquire EIF through one of its subsidiaries. The acquisition, which is subject to customary closing conditions including investor consents and regulatory approvals, is expected to close before year-end. For more information, visit <a href="https://www.eif.com">www.eif.com</a>.

#### **About I Squared Capital**

I Squared Capital is an independent global infrastructure investment manager focusing on energy, utilities, and transport in North America, Europe, and select high growth economies. The Firm has offices in New York, Houston, London, New Delhi, Hong Kong and Singapore.

#### **About North America Project Development**

North America Project Development, LLC was established by Bill Siderewicz and Bill Martin, each with over 34 years experience in private power, having developed well over 10,000 MW of operating power projects.

#### **Media contacts:**

#### Alex J. Stockham

Energy Investors Funds Senior Vice President, Rubenstein Associates (646) 251-3736 astockham@rubenstein.com

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Dec. 8, 2014 17:12 EST Nov. 16, 2014 15:35 EST

#### **Exclusive**

#### Morgan Stanley alums to acquire PJM project stake

I Squared Capital, an infrastructure fund formed by several former Morgan Stanley executives, has agreed to acquire an interest in an 869 MW power project in the PJM region.

In the deal, I Squared is buying a stake in the Oregon Clean Energy Center project in Ohio from Energy Investors Funds' EIF United States Power Fund IV, L.P. and North America Project Development, LLC, *SparkSpread* has learned.

Officials at I Squared, EIF and NAPD could not immediately be reached.

The project, which is located in a suburb of Toledo, in northwestern Ohio, represents an estimated total project cost of \$850 million.

EIF and NAPD retained BNP Paribas earlier this year to advise on a sale of an equity interest in the project.

At that time, the sponsors had negotiated and were set to sign an EPC agreement with Black & Veatch.

BNP and Credit Agricole, which are leading non-recourse debt financing for the project, recently lined up nine lenders with tickets of \$100 million each.

Meanwhile, Morgan Stanley is understood to have agreed to provide a commodity hedge in the form of a heat-rate call option for the Oregon project.

The equity sale, non-recourse debt financing and commodity hedge were signed on Friday, according to two industry sources.

The Oregon project cleared the 2017/18 PJM Base Residual Auction at \$120/megawatt day and is expected to enter commercial operation in May 2017.

Siemens is providing two SGT6-8000H gas turbines and one steam turbine.

The deal follows a transaction last year in which I Squared partnered with Veolia Energy North America to acquire the 256 MW Kendall power plant in Massachusetts from NRG Energy.

I Squared was formed by several executives with Morgan Stanley's infrastructure arm, including Sadek Wahba, Gautam Bhandari and Adil Rahmathulla.

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# Power Finance & Risk

Exclusive Insight on Power M&A and Project Financing

By the publisher of GlobalCapital

Mergers & Acquisitions

Project Finance

## EIF Nets Equity Investment For Oregon CCGT

**I Squared Capital** is buying half of **Energy Investors Funds**' Oregon combined cycle project.

#### Panda Wraps Stonewall B Loan Package

**Panda Power Funds** has inked a \$571 million deal backing its Stonewall project in Virginia.

Page 6

## SunEdison, TerraForm Net First Wind

Holly Fletcher

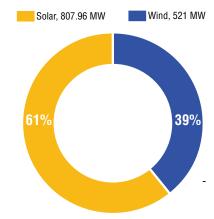
unEdison and TerraForm Power have agreed to buy First Wind for \$2.4 billion, including a \$510 million earn-out.

First Wind will sell its 521 MW of operating wind assets — including its partnership with **Emera** — to TerraForm for \$862 million.

The acquisition by TerraForm is its first outside of the solar sector. The yield company wants to assemble a portfolio of renewables, including wind, storage and hydro.

SunEdison will pick up a 1.6 GW project development pipeline and a 6.4 GW pipe line of projects that are in early development stages. The earn-out is associated with the 1.6 GW project pipeline over

## TerraForm Power Portfolio



Source: TerraForm Power, First Wind

## Dozens Of Lenders Circle \$11.5B Corpus Christi LNG

Nearly three dozen lenders are considering making commitments to **Cheniere Energy**'s \$11.5 billion financing for the Corpus Christi liquefied natural gas export project in Texas, say deal watchers. **Société Générale** is advising Cheniere on the deal and is still auditioning potential joint lead arrangers.

The financing has attracted a wide swath of project finance players including

ica Merrill Lynch Scotiabank BBVA Bank of Montreal, Barclays, BNP Paribas, CIBC Crédit Agricole, Credit Suisse, Deutsche Bank GE Energy Financial Services Gold, man Sachs HSBC ICBC ING, PAGE 2 »

# **Q&A: Andrew Jones, AMP Capital**

AMP Capital raised \$1.1 billion for its global Infrastructure Debt Fund II, surpassing its \$1 bil lion target. Senior REPorter Olivia Feld spoke Jones , global head of infrasture debt at AMP Capital head quarters in Sydney, about M&A driving lending activities and how the shop sources its deals.

Infrastructure Debt rpassing its \$1 bil opportunity now in the Amer icas and what do you think spoke thas change the first fund was raised AMP Capital head and invested?

**Jones:** We've been active in the Americas for many years now.



I think it was back in maybe 2005 we made our first investment in the U.S. It's only in the last number

of years that we've had a team based in the U.S. on the ground and really that's reflective of the fact that we have been seeing a growing number of opportuni ties for several years now. As I say, most of those continue to be in the energy space in one form or another. But we're now seeing further opportunities in the other sectors we target. As I mentioned, we look at transpor tation assets and we've consid ered a number of investments in the U.S. in both the ports and airport sectors, for example.

PFR: You have been more active in the U.S., why is the market more attractive now than it was 10 years ago, when you first started making investments?

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**STRATEGIES** 

## **Demand Could Speed Up Terra-Gen B Loan**

**Terra-Gen Power**'s \$300 million term loan B could wrap before its Dec. 3 commitment deadline on strong investor demand. **Goldman Sachs** is leading the deal.

The B loan, which launched Nov. 12 at LIBOR plus 425-450 basis points, has "good early traction," says a deal watch er. Terra-Gen could see pric ing come in under the guid ance given the strong investor response, notes another finan cier. The syndication process

"could accelerate" and wrap early, notes the deal watcher.

The package is rated BB+ by Standard & Poor's

#### **Moody's Investors Service**

The B loan is part of a \$325 mil lion package that includes a \$25 million revolver (PFR, 11/12). The seven-year B loan is pitched with a 1% LIBOR floor and a 99 original issue discount. The debt-will sit at **Terra-Gen Finance Co**.

Proceeds from the B loan-will be used to pay down project

level debt as well as buy out tax equity stakes in six of the wind farms. Terra-Gen will also make and exact by distribution to its investors Capital.

#### Partners and Global Infrastructure Partners .

Terra-Gen Finance owns a port folio of 18 wind farms totaling 497 MW in California, Colorado, Minnesota and Wyoming. It also owns equity stakes in three solar and geothermal projects that total 157 MW in California.

Citicorp USA, a subsidiary of Citigroup, owns tax equity stakes in the 2 MW Chandler wind farm in Buffalo Ridge, Minn., the 2 MW CapitaLightote II, the 25 MW Foote III, the Infra
In The Light Foote IV wind farms and the 23 MW Oak Creek wind farm in Tehachapi, Calif., and the 30 MW Ridge Crest in Peetz, Calif., according to a filing with the U.S. Federal Energy Regulatory Commission

A Goldman spokeswoman declined to comment. ■

**MERGERS AND ACQUISITIONS** 

## **EIF Ropes I Squared For Oregon Equity**

**Energy Investors Funds** has sold half of its 869 MW Oregon combined cycle project in Oregon, Ohio, to infrastructure investor **Squared Capital** .

I Squared, an infrastructure fund based in New York, will co-control the project, says a deal watcher. Developer

**Project Development** will retain an economic carried interest separate from the equity owners.

#### **FAST** FACT

The equity stake sale has been in tandem with a \$591.4 million financing led by BNP Paribas and Crédit Agricole. The loan closed at LIBOR plus 325 basis points. I Squared has been tracking several gas-fired projects in the region and was interested in Oregon for many reasons includ ing its EPC con tract with Black &

Veatch and affiliation with EIF, **Rahmathulla**, partner at I Squared told *PFR* .

The equity stake sale has been in tandem with a \$591.4 million financing led by **Paribas Créditi Agricole** (PFR, 10/30). The loan closed at LIBOR plus 325 basis

points. The pricing is expected to step-up to L+350 bps for the first three years after the plant is online and then to L+375 bps for the remaining four years. Two different hedge

structures have been proposed: a heat-rate call option or a revenue put floor contract.

Nearly a dozen banks were casing the deal, including Associated Bank Bank of America CLT Group Deutsche Bank ING, ICBC Investec NordLB Prudential Capital Group Narda Agartica in Scotland Sun Trust and Wells Fargo

BNP advised EIF along with **Orrick Her- rington & Sutcliffe** while **Polk**advised I Squared. **& Spalding King**on the project's the engineering, procure
ment and construction contract.

I Squared will own the stake via its \$2.5 bil lion iSQ Global Infrastructure Fund which is being acquired by Management (PFR, 11/7), owns Oregon via its United States Power Fund IV

Oregon will be I Squared's sixth power investment in the U.S. It owns a hydro port folio in Pennsylvani**Adik**! New York, a cool ing asset in Cincinnati, Ohio, that it bought from **DTE Energy**, as well as a cogeneration facility in Boston. It was found**BMP** three alum of **Morgan Stratley**ut fund was targeted to hit \$2 billion (PFR, 7/23/13).

An EIF spokesman declined to comment on details of the financing. Spokespeople for BNP and CreditAg did not respond to inquiries.

## First Reserve To Buy Apex Wind Project

**First Reserve** has agreed to buy the 298 MW Kingfisher wind project from **Apex Clean Energy** 

First Reserve and Apex anticipate clos ing the acquisition by year-end, according to a filing with the U.S. Federal Energy Regardsory Commission. The acquisi adiois endarks the first wind purchase by First Reserve Energy Infrastructure Fund II

Kingfisher is on track to be online by the end of 2015 to qualify for the production EMAx credit. Whether the project has a power purchase agreement could not be immedi EMELY learned.

Apex has been looking to finance the Kingfisher project in Canadian and Kingfisher Counties, Okla., as well as the 300 MW Balko wind project in Beaver - County, Okla. The Charlottesville, Va.-based shop has been trying to sell Kingfisher in a process run by **Morgan Stanley** for about a year (PFR, 12/12/13).

Details on the purchase price or the financ ing of Kingfisher could not be immediately learned. A spokeswoman for First Reserve declined to comment while an Apex official was not immediately available to comment.

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21 November 2014

#### Black & Veatch Named EPC Contractor for High-Efficiency Combined Cycle Power Project

Oregon Clean Energy Center to provide needed generation as coal-fired plants retired

Overland Park, Kansas (21 November 2014) -- Black & Veatch has been selected as prime contractor for the engineering, procurement, construction and startup of the Oregon Clean Energy Center (OCEC) in Oregon, Ohio. The natural gas combined cycle power plant is being developed by North America Project Development, LLC (NAPD) with equity financing from Energy Investors Funds and I Squared Capital.

The 869 megawatt facility will provide electricity for growing manufacturing and residential use. It replaces generation from several aging coal-fired power plants in the region that are being retired. Construction is expected to begin in November 2014. The plant is expected to begin commercial operations by July 2017. More than 500 workers are expected to be at the project site during peak construction.

"We selected Black & Veatch because of their world class engineering skill, their strong track record in delivering major power generation projects around the world and in the U.S., and because of their depth of awareness of the new technology we planned to employ," said William J. Martin, Managing Partner of

The facility includes two Siemens H class combustion turbines. The plant provides the most efficient generation capability in the market and significantly reduces air emissions. Existing electrical transmission lines are adjacent to the project site. Natural gas for the OCEC is delivered by a new pipeline from the Maumee hub which provides reliable, economic gas supplies. Water for the facility will be provided from Lake Erie by the city of Oregon.

"This energy center will employ among the best quality technology that increases efficiency and emissions control," said Dean Oskvig, President and CEO of Black & Veatch's energy business. "By implementing this project we are supporting NAPD's goal to provide customers with cost-effective clean energy."

#### Editor's Notes:

- The Oregon Clean Energy Center will utilize two-high efficiency Siemens SGT6-8000H combustion turbine generator (CTGs), two heat recovery steam generators (HRSGs) supplied by NEM, and a Siemens SST6-5000 steam turbine. To increase power output, the HRSGs are equipped with supplemental firing and the gas turbines are equipped with evaporative coolers.
- The Siemens H class combustion turbines are being installed in a two-onone combined cycle configuration.
- The OCEC's wet cooling system is optimized for the specific plant location. · Engineering and procurement for the project will be handled primarily by
- Black & Veatch's professionals at the company's Global Headquarters in Overland Park, Kansas.
- Construction will be performed by Black & Veatch using a combination of direct hire labor as well as multiple subcontracts
- Startup and testing will be performed by Black & Veatch using its own experienced startup teams.

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#### About Black & Veatch

Black & Veatch is an employee-owned, global leader in building critical human infrastructure in Energy, Water, Telecommunications and Government Services. Since 1915, we have helped our clients improve the lives of people in over 100 countries through consulting, engineering, construction, operations and program management. Our revenues in 2013 were US\$3.6 billion. Follow us on <a href="https://www.bv.com/">www.bv.com/</a> (http://www.bv.com/) and in social media.

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## OREGON CLEAN ENERGY CENTER MONTHLY REPORT

**MONTH 1, NOVEMBER 2014** 

Oregon Clean Energy, LLC

PROJECT 184704 FILE 28.6000 141202



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Permit Status Action Item List

Major OEM Monthly Reports

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#### 1.0 Executive Summary

This is the first in a series of monthly progress reports that are provided throughout the duration of the project. This particular report covers the period from receipt of LNTP on August 19, 2014 up to the end of November 2014.

The period up to financial closing and subsequent to NTP provided an extended duration wherein Black & Veatch was able to accomplish a lot of activities on the engineering and procurement front as well as planning on the construction side. Currently, thirteen (13) procurement packages have been awarded and represent the majority of the major equipment for the project.

#### 2.0 Significant Events

Notice to Proceed (NTP) was received on November 14, 2014. Subsequently, the B&V mobilization to site occurred on November 17, 2014 and construction of the project has started.

#### 3.0 Contract Status

Attachment A contains the monthly cost report, showing the contract price, approved change orders, pending change orders, amounts earned to date, and amounts paid to date.

Attachment B provides the monthly cash flow report reflecting amounts earned to date and amounts forecasted by month. Curves of the baseline, actual incurred and forecasted cash flow are also provided with the monthly cash flow amounts reflected.

Attachment C provides the Change Order log including a brief description, status (pending, rejected or approved), and anticipated cost and schedule impact. Also included is a curve indicating the value of approved change orders by month.

#### 4.0 CPM Schedule Status

A significant amount of work has taken place in the development of the CPM schedule for the project. The activities completed or in progress include the following:

- Black & Veatch has reviewed and aligned the standard discipline fragnets, with the projectspecific execution strategy, including activity durations, sequence, logic, and resources to date.
- All project activities have been created and loaded into the Primavera P6 tool, tying discipline fragnets together.
- Key client milestones and submittals have been added.
- Float reviews have been conducted to validate EPC progress and engineering discipline interfaces and establish project critical and sub-critical paths.
- Measures have been put in place to ensure that turnover from engineering and procurement support the construction need dates.
- The project team has established grouping plans to support engineering resource leveling, and completed discipline-specific leveling reviews.

Month 1, November 2014 Page **2** of 33

• Up-front planning with construction personnel is in progress to support the development of detailed construction activities in the schedule.

A draft schedule is currently being reviewed by the poject team. Once all internal reviews are completed and issues resolved, it will be baselined. The baseline schedule will allow Black & Veatch to begin developing progress and commodity installation curves, and revise the existing Level 1 and 2 schedules accordingly. The first CPM schedule is expected to be issued for Owner review in January 2015 consistent with the EPC Agreement requirements.

After the baseline of the schedule is completed, upcoming monthly progress reports will include the analysis of the five shortest paths as well as a variance report identifying all activities that have slipped showing current total float, impact of slippage, and a specific recovery plan in the event of any slippage in the critical path of the Work which would cause a date in the schedule to occur after the applicable completion date.

Refer to Attachment D [LATER] for a copy of the hi-level, Primavera schedule summary as well as the file in native format.

#### **5.0 Engineering Status**

The preliminary engineering deliverables list is provided in Attachment E. Upon finalization of the L3 schedule, the forecast and construction release dates will be added along with the relevant statistics.

The following provides discipline-specific engineering and design activity status. In addition, any outstanding items from the design review meetings are highlighted.

#### Civil/Structural

The following activities have been completed to date and within the month of November.

- Continued receiving subsurface investigation lab work results and completed the analysis.
- Produced the Geotechnical Report for in-house review and design support.
- Supported deliverables for ACOE permit by Client.
- Responded to Client review comments to the Site Arrangement drawing.
- Issued the Admin/Control/Warehouse/Maintenance Building architectural arrangements for Client Review.
- Continued with underground utility planning and design activities.
- Continued with support for plant arrangement development.
- Initiated layout and design activities for the STG mat/pedestal foundation.
- Initiated layout and design activities for the HRSG foundations.
- Continued with superstructure planning and layout activities.
- Supported specification development, bid evaluations, and negotiations/awards of various packages as noted in Attachment F.
- Continued with in-house review of B&V-generated drawings.

Month 1, November 2014 Page **3** of 33

Continued with review of vendor document submittals.

#### Mechanical

The following activities have been completed to date and within the month of November.

- Finalized routing of underground piping for the following systems:
  - Instrument Air
  - o Hydrogen Storage
  - o Ammonia Supply and Storage
  - Circulating Water
  - o Circulating Water Chemical Feed
  - Closed Cycle Cooling Water
  - o Cycle Makeup and Storage
  - Fuel Gas Supply
  - Site Fire Protection
  - o Combustion Turbine
  - Service Water Supply and Stoarge
  - o Potable Water
  - o Circulating Water Pretreatment
  - o Cycle Makeup Treatment
- Issued General Arrangement drawings for Owner review.
- Issued P&IDs for In-House Review for the following systems:
  - o LAE HP Desuperheating Spray
  - o LBA HP/LP Main Steam
  - o LBC Cold Reheat Steam
  - o LBB Hot Reheat Steam
  - o MAN Turbine Bypass Station
  - o AAA P&ID Index & Legend
- Continue development of General Arrangement for the Water Treament Area.
- Continued system design for the underground piping of the Sanitary Drainage and Treatment, Wastewater Collection and Treatment, and Oil Spill Prevention systems.
- Continued finalizing routing of the HP/LP Main Steam, Hot Reheat Steam, Cold Reheat Steam, Auxiliary Steam, Boiler Feedwater and Condensate piping.
- Continue system design for the Auxiliary Steam, Condensate/Condenser, Boiler Feedwater, HRSG, Main Steam, Low Pressure Steam, Hot Reheat Steam, Cold Reheat Steam, ST Seals ands and Drains (ST) systems.
- Supported specification development, bid evaluations, and negotiations/awards of various packages as noted in Attachment F.

#### Chemical

The following activities have been completed to date and within the month of November.

Month 1, November 2014 Page 4 of 33

- Developed preliminary arrangements for the Water Treatment Area, and Water Treatment and Circulating Water Chemical Feed Buildings in preparation of Owner review of the Site Arrangement Drawings.
- Released underground pressure pipe for routing for the Circulating Water Chemical Feed., Ammonia Storage and Supply, Cycle Makeup Treatment, and Circulating Water Pretreatment Systems.
- Performed preliminary equipment sizing calculations for the Cycle Chemical Feed, Circulating Water Chemical Feed, Ammonia Storage amd Supply, Wastewater Collection, and Circulating Water Pretreatment Systems.
- Performed initial development for all Chemical system P&ID's in preparation for "In-house" review.
- Assisted in the preparation of Project Control Documents such as the Project Design Manual, Project Instructions Manual, Project Schedule, etc.
- Updated the Water Mass Balance and issued for "In-house" review.
- Evaluated the effects on the proposal design basis of the new raw water data, and prepared a white paper on water treatment including waste products.
- Supported specification development, bid evaluations, and negotiations/awards of various packages as noted in Attachment F.

#### **Electrical /Control**

The following activities have been completed to date and within the month of November.

- Finalized the following calculations to support procurement of electrical equipment and electrical design.
  - o CT Generator Transformer Sizing
  - ST Generator Transformer Sizing
  - CT GSU Var Flow
  - ST GSU Var Flow
  - o ST GCB and Isophase Short Circuit
  - CT GCB and Isophase Short Circuit
  - Aux power System Analysis (for UAT sizing)
- The overall one-line and the medium voltage one-lines were issued for In House Review.
- The main ductbank routes, sizes, and manholes have been determined. Preliminary ductbank tube assignments have been made. Preliminary cable derating for power feeders were performed to support ductbank sizing.
- The load list was initiated and populated with the current load information.
- Site soil conductivity testing was completed and the values input into the overall grounding calculation.
- Electrical equipment locations have been determined and information provided for the plant arrangements.

Month 1, November 2014 Page **5** of 33

- Iso-phase routing sketches were generated to support the isolated phase bus duct procurement.
- The preliminary BOP DCS I/O count was issued to the DCS supplier (Siemens).
- Instrumentation reviews of P&IDs have commenced along with instrument tagging.
- Supported specification development, bid evaluations, and negotiations/awards of various packages as noted in Attachment F.

#### **6.0 Procurement Status**

Attachment F provides the procurement status report including status of bids out for quotation, in evaluation, and awarded along with anticipated delivery dates for equipment to site. The number of packages will continue to evolve as the design and construction progress throughout the project.

The relevant procurement statistics are represented below:

PROCUREMENT STATUS	NUMBER
Packages Awaiting Preparation	63
Package Count in Process (In preparation or IHR)	5
Packages Out for Bid	6
Packages in Negotiation	11
Estimated Total Number of Procurement Packages	85
Packages Out for Signature/Awarded	13
Percent Complete	15.3%

Attachment G provides the vendor document deliverable log (e.g. Schedule of Submittals (SOS) log).

Attachment H provides the Inspection and Test Plan (ITP) along with a summary of upcoming tests.

#### 7.0 Construction Status

The Site Development Contractor mobilized to site on November 17, 2014, along with three Black & Veatch Construction personnel. Work commenced with the installation of silt fencing per the Stormwater Pollution Prevention Plan (SWPPP). Development of the main construction entrance from Lallendorf Road has started, as well as the development of areas for temporary construction management trailers.

To date, 7,100 linear feet of silt fencing has been installed and 55 people have received site orientation.

Attachment J [LATER] provides statistical reports/curves (e.g. construction installation) that show progress against the plan on an overall basis and for each major commodity including: piling, concrete, structural steel, equipment installation, piping and specialties, conduit, ductbank, cable tray, wire and cable and terminations.

Month 1, November 2014 Page **6** of 33

Attachment K provides overall construction and construction craft manpower histograms showing the baseline, current, actual and forecasted manpower required by month as well as the schedule performance index for each.

Attachment L provides a summary of the construction turnover to start-up status, by system, and the quantitative progress including relevant statistics. [PROVIDED LATER]

Attachment M provides the Request for Information (RFI) log documenting the information correspondence between site (construction) and the home office (engineering). [PROVIDED LATER]

#### 8.0 Startup Status

Attachment N provides the start-up and commissioning status summary report which includes status of the Turnover (TO) packages for two purposes: a) TO from construction to the startup/commissioning team; b) TO of the systems to Owner's O&M contractor.

#### 9.0 Project Risk Summary

Refer to Attachment P for the risk log that presents all known risks on the project. Descriptions, estimated probability and impact ratings, affected workstream(s), submitter, responsible party, description of mitigation strategies, and status of action/progress is presented.

#### 10.0 Environmental, Health, Safety & Security (EHS&S)

There were no Safety, Health, or Environment Incidents to report.

Statistics for the project will be presented in the following preliminary fashion starting next month.

DATA	MANHOURS
Engineering & Procurement Hours	
Construction & Subcontractor Hours	
Total Hours	
Total Number of Professionals/Subcontractors	

RATES	
Lost Time/DAFW Rate	
Recordable Incident Rate (RIR)	
Experience Modification Rating (EMR)	

If applicable, any safety, health, or environmental incident reports are provided in Attachment Q.

Month 1, November 2014 Page **7** of 33

#### 11.0 Permitting Status

A summary of applicable Contractor permits, either completed, or upcoming is summarized in Attachment R.

Contact information for the agencies is provided below.

ENTITY	NAME / POSITION	PHONE NUMBER EMAIL
City of Oregon	Rodney Shultz, P.E. Deputy City Engineer	P: 419.698.7015 F: 419.691.0241 rshultz@ci.oregon.oh.us
Ohio EPA	Craig Butler Director	P: 614.644.3020
United States Army Corps of Engineers (USACE)	Brian Swartz	By Owner

#### 12.0 Quality Assurance

The project Quality documentation has been submitted for information. Once a permanent QA/QC professional is assigned by PPMS, further discussion will take place regarding further review of the quality standards utilized by Black & Veatch.

The Inspection & Test Plan (ITP), which is used to forecast inspection dates, is being finalized and expected to submit to the Owner within the month. The ITP will be continuously updated as revisions to vendor schedules are received.

There are no quality control activities to report for the month.

#### 13.0 Site Progress

Progress photos are provided herein for the month.

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Figure 1 – Silt Fence Progress



Figure 2 – Plant Entrance Road Work



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Figure 3 – Installation of Temporary Power Poles



Figure 4 – Beginning Road Work on South Side of Site



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#### 14.0 Miscellaneous

The current action item list is provided in Attachment S.

Attachment T provides a copy of the monthly reports from the major OEMs.

Month 1, November 2014 Page 11 of 33

## **SIEMENS**

## SIEMENS ENERGY, INC

(ORLANDO, FLORIDA USA)



MONTHLY REPORT

# SIEMENS ENERGY, INC MONTHLY REPORT

Oregon Clean Energy Combined Cycle Project

**Monthly Progress Report #3** 

Period Ending: November 30, 2014

Purchase Order 184704.67.9100

The information included herein is proprietary and protected from disclosure under article 00512.19 of the Purchase Order and shall not be transmitted or disclosed to a third party without first obtaining the prior written approval of Siemens Energy, Inc



#### PROJECT DESCRIPTION

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Customer: Black & Veatch Corporation

Plant Location: 816 North Lallendorf Road, Oregon, OH 43616

**Guaranteed Substantial Completion Date:** May 15<sup>th</sup> 2017

Contract Type: Power Island Equipment Supply

#### **SIEMENS SCOPE**

2x1 8000H(1.3) power island

- 2 x SGT6-8000H Combustion Turbines
- 1 x Steam Turbine SST5000 HI50-V1-TPL-60Hz + L2 X 8.7-M3-60Hz
- 3 x SGen6-2000H (110/46) V2
- Heat Recovery Steam Generator
- T3000 Distributed Control System
- Continuous Emission Monitoring System
- Power Island Equipment (feedwater/condensate pumps, bypass valves)
- Technical Field Assistance

## **SIEMENS**

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#### 1. Executive Summary

Siemens activities this month focused on engineering work to meet Schedule of Submittal items and on issuing purchase orders for sub-components, ST and GT auxiliary equipment and BOP components.

A continuous dialog between Siemens engineers and engineers from Black & Veatch is resulting in timely responses to Action Items and resolution of Black & Veatch comments to Siemens drawings and documents. Project communications is working without problem.

Weekly Action Item telephone conferences are continuing to be an effective forum for discussing and expediting open items. Both parties are being kept aware of critical information needs and both parties have been very cooperative at resolving issues.

At this point in time there are no significant issues to report.

#### **Combustion Turbines**

Manufacturing at the Siemens factory is not schedule to commence at this time, however all Long Lead Time Material has been ordered and Engineering is on track to support the delivery dates according to the delivery schedule.

#### Steam Turbine

Manufacturing at the Siemens factories is not schedule to commence at this time, however all Long Lead Time Material has been ordered and Engineering is on track to support the delivery dates according to the delivery schedule.

#### Generators

Manufacturing at the Siemens factory is not schedule to commence at this time, however all Long Lead Time Material has been ordered and Engineering is on track to support the delivery dates according to the delivery schedule.

#### HRSG

C-fast modules, drums, Blow Down Tanks, Burner Management System and SCR/CO catalysts were purchased.

Stack damper will be awarded to NPS, Germany.

Basic Engineering is 85% complete. Detail Engineering is well underway.

Engineering is on track to support the delivery dates according to the delivery schedule.

#### Power Island Equipment

Siemens placed purchase orders for the Steam Bypass Valves and CEMS.

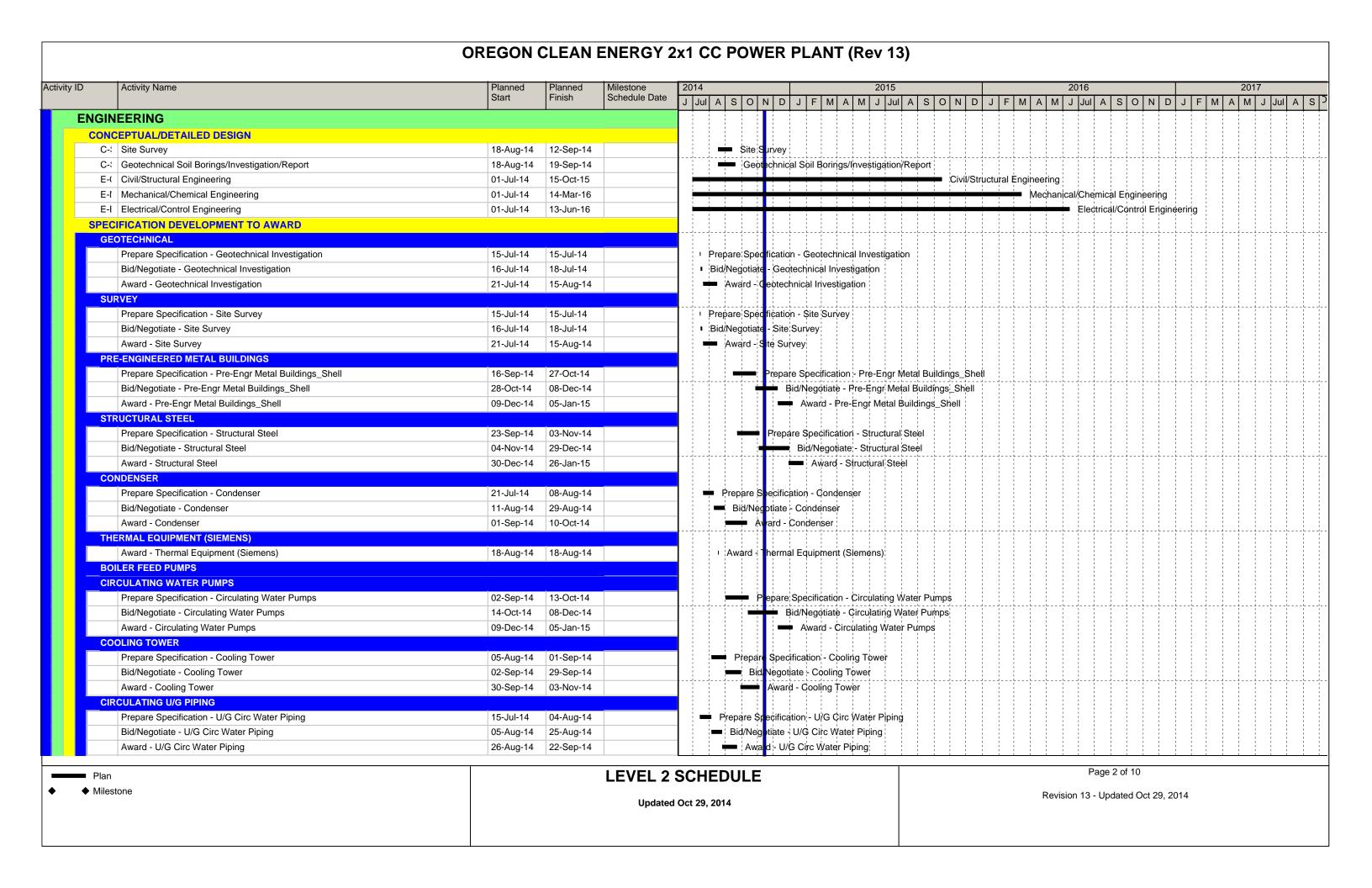
#### **ATTACHMENT 7**

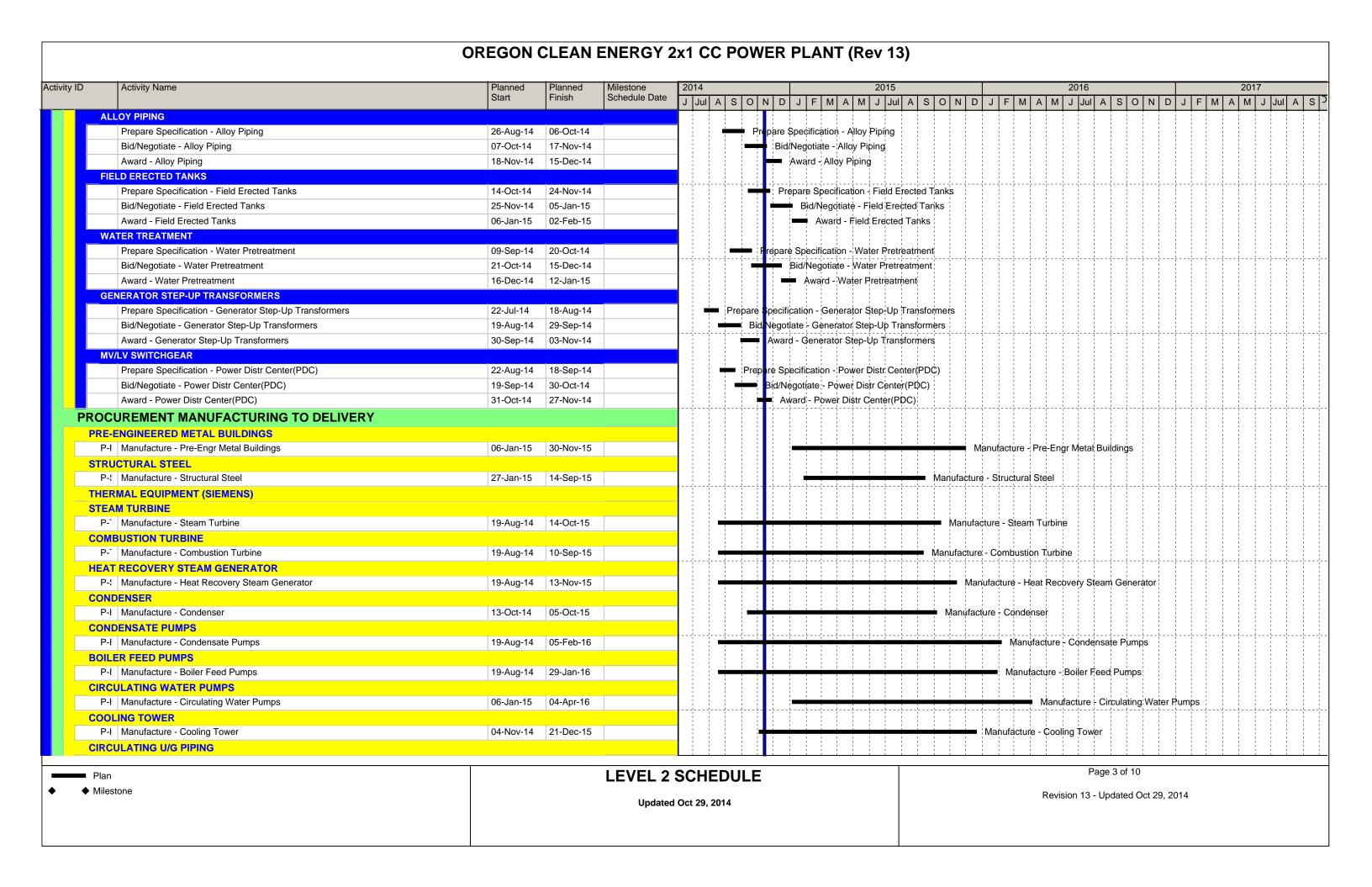
#### EXHIBIT 3

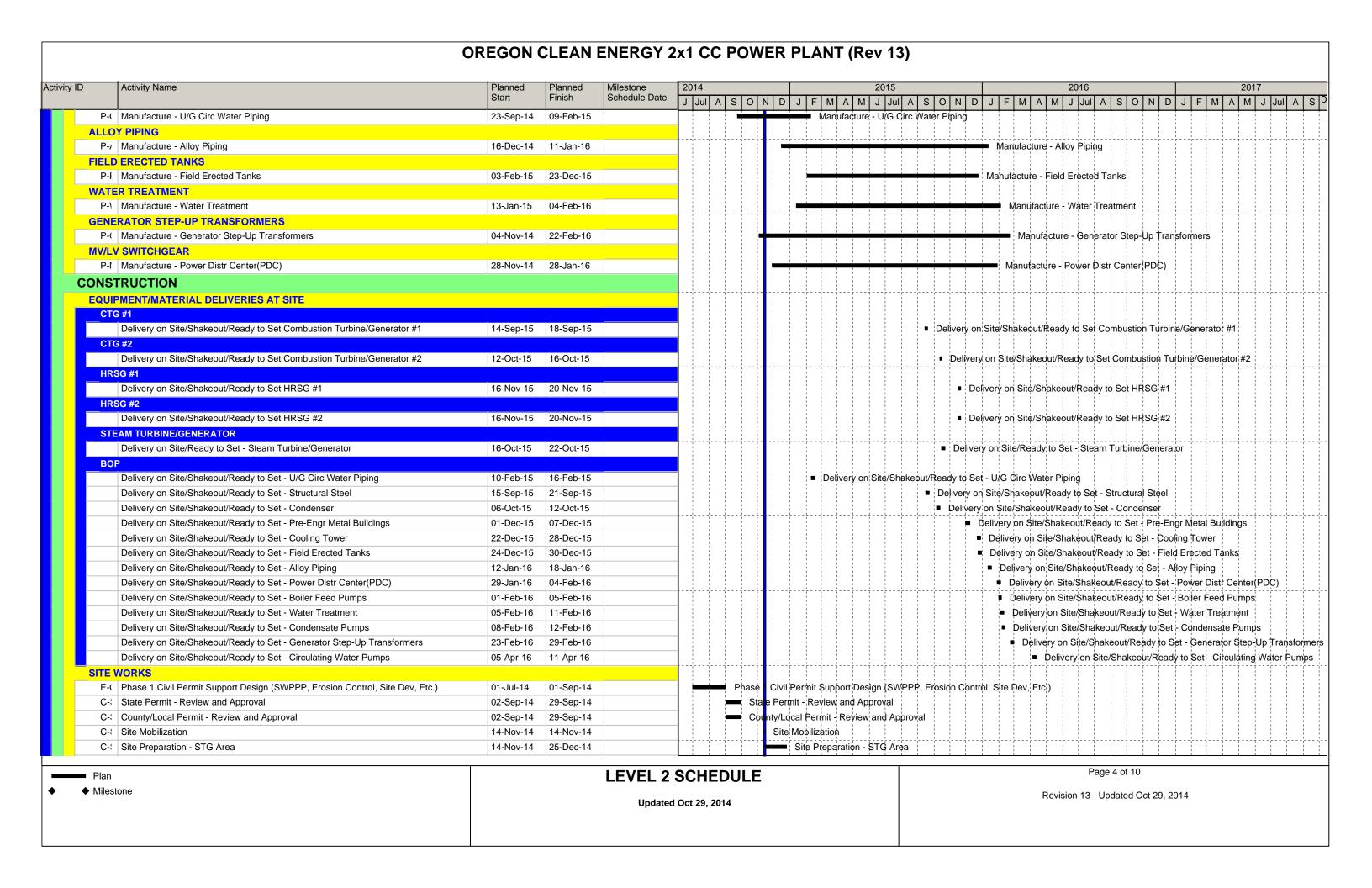
#### SCHEDULE E-1

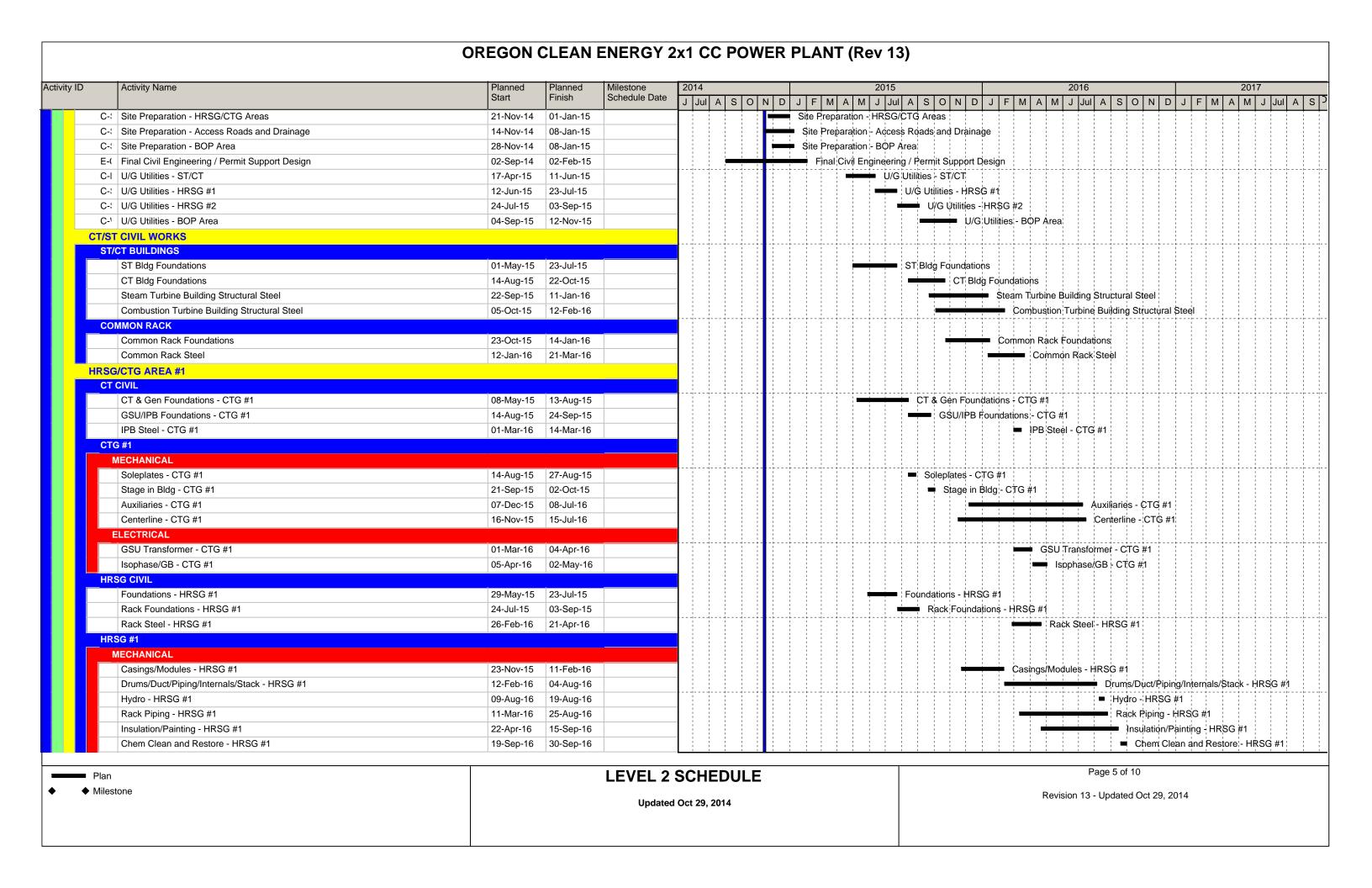
#### REVISED LEVEL 2 SCHEDULE

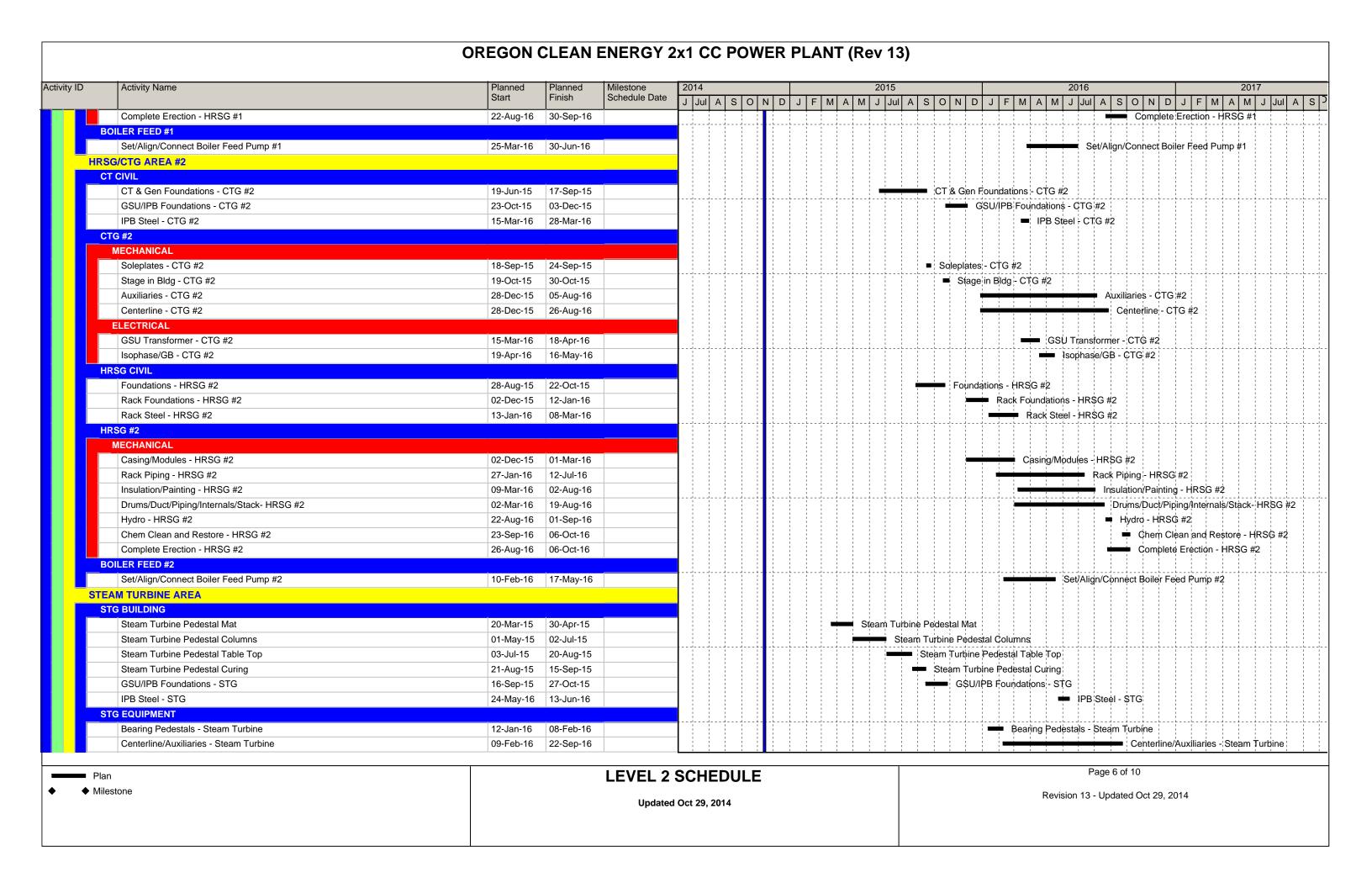
<sup>,</sup> ID	Activity Name	Planned	Planned	Milestone	2014			2015 2016 2017	
		Start	Finish	Schedule Date		N D J	F M A	M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J	Jul i
DREGO	CLEAN ENERGY 2x1 CC POWER PLANT (Rev 13)								
MILES"	ONES								
	Conceptual Engineering	01-Jul-14			Conceptual En	ineering			
	Limited Notice to Proceed/Execute Prime Contract	18-Aug-14				1 1 7 1	ceed/Exec	ute Prime Contract	
	Limited Notice to Proceed 2	29-Oct-14		29-Oct-14	<b>-</b>	Limited Not	i i i		
A1010	Notice to Proceed	14-Nov-14		14-Nov-14		Notice to			
A1020	Mobilize to Site	14-Nov-14		25-Jan-15		Mobilize t	o Site		
A1160	HRSG1 Foundations Complete		21-Jul-15	01-Oct-15				◆ HRSG1 Foundations Complete	
A1170	CTG1 Mat and Pedestal Foundations Complete		11-Aug-15	22-Oct-15	1			◆ CTG1 Mat and Pedestal Foundations Complete	
A1030	CTG1 Delivery to Midwest Terminals (Toledo)		14-Sep-15	25-Nov-15				◆ CTG1 Delivery to Midwest Terminals (Toledo)	
A1330	CTG2 Mat and Pedestal Foundations Complete		15-Sep-15					◆ CTG2 Mat and Pedestal Foundations Complete	++-
	HRSG2 Foundations Complete		22-Sep-15		1			◆ HRSG2 Foundations Complete	
A1040	CTG2 Delivery to Midwest Terminals (Toledo)		12-Oct-15	23-Dec-15	1			◆ CTG2 Delivery to Midwest Terminals (Toledo)	
A1050	Steam Turbine - Rotors/Casings/Generator Delivery to Midwest Terminals (Toledo)		15-Oct-15	26-Dec-15	1			◆ Steam Turbine - Rotors/Casings/Generator Delivery to Midwest Terminals (To	edo)
A1070	Heat Recovery Steam Generator #1 Delivery to Midwest Terminals (Toledo)		16-Nov-15	27-Jan-16				◆ Heat Recovery Steam Generator #1 Delivery to Midwest Terminals (Toled	၁)
A1080	Heat Recovery Steam Generator #2 Delivery to Midwest Terminals (Toledo)		16-Nov-15	27-Jan-16				◆ Heat Recovery Steam Generator #2 Delivery to Midwest Terminals (Toled	o)
A1190	Energize High Voltage Switchgear		15-Jun-16	26-Aug-16	1			◆ Energize High Voltage \$witchgear	
A1200	Back feed Complete		15-Jun-16	26-Aug-16				◆ Back feed Complete	
A1220	Condenser Hydro Complete		08-Jul-16	18-Sep-16	1			◆ Condenser Hydro Complete	
A1090	HRSG #1 Complete Boiler Hydro		17-Aug-16	28-Oct-16	1			◆ HRSG #1 Complete Boiler Hydro	
A1100	HRSG #2 Complete Boiler Hydro		01-Sep-16	12-Nov-16				♦ HRSG #2 Complete Boiler Hydro	
A1230	CTG1 initial turning gear operation		02-Sep-16	13-Nov-16	1			◆ CTG1 initial turning gear operation	
A1210	Water Pre-Treatment ready for service		09-Sep-16	20-Nov-16				◆ Water Pre-Treatment ready for ser	/ice
A1320	Cooling Tower and Basin Ready for Service		15-Sep-16	26-Nov-16	1			◆ Cooling Tower and Basin Ready fo	r Serv
A1250	CTG2 initial turning gear operation		07-Oct-16	18-Dec-16	1			◆ CTG2 initial turning gear operat	ion
A1260	STG initial Turing gear operation		21-Oct-16	01-Jan-17				◆ STG initial Turing gear operat	ion
A1110	CTG1 First Fire		31-Oct-16	11-Jan-17	1 : : : : :			♦ CTG1 First Fire	
A1270	CTG1 first synch		01-Nov-16	12-Jan-17	1			◆ CTG1 first synch	
A1120	CTG2 First Fire		07-Nov-16	18-Jan-17				◆ ¢TG2 First Fire	1 1
A1280	CTG2 first synch		08-Nov-16	19-Jan-17	1			◆ CTG2 first synch	
A1290	Complete Steam Blows		21-Nov-16	01-Feb-17	1			◆ Complete Steam Blows	
A1130	STG First Sync		12-Dec-16	22-Feb-17	1			◆ \$TG First Sync	
A1300	Steam Admitted to ST		12-Dec-16	22-Feb-17	1			◆ Steam Admitted to ST	
A1310	Mechanical Completion		23-Dec-16	05-Mar-17	1			◆ Mechanical Completi	חכ
Z-PL1	Planned Substantial Completion		03-Mar-17	01-Jul-17	]			◆ Planned \$u	stanți
Z-PL1	Guaranteed Substantial Completion		01-Jul-17	01-Jul-17					♦ Gi
Z-PL1	Final Completion		28-Dec-17						
OWNE	RREQUIREMENTS								
Z-PL1	Owner (Potable Water)		29-Mar-16					◆ Owner (Potable Water)	
Z-PL1	Owner (Power Available for Backfeed)		15-Jun-16		1			◆ Owner (Power Available for Backfeed)	
Z-PL1	Owner (Gas Available)		01-Sep-16					♦ Owner (Gas Available)	
Z-PL1	Owner (Raw Water Available)		01-Sep-16					◆ Owner (Raw Water Available)	
Plan				LEVEL 2	SCHEDULE			Page 1 of 10	
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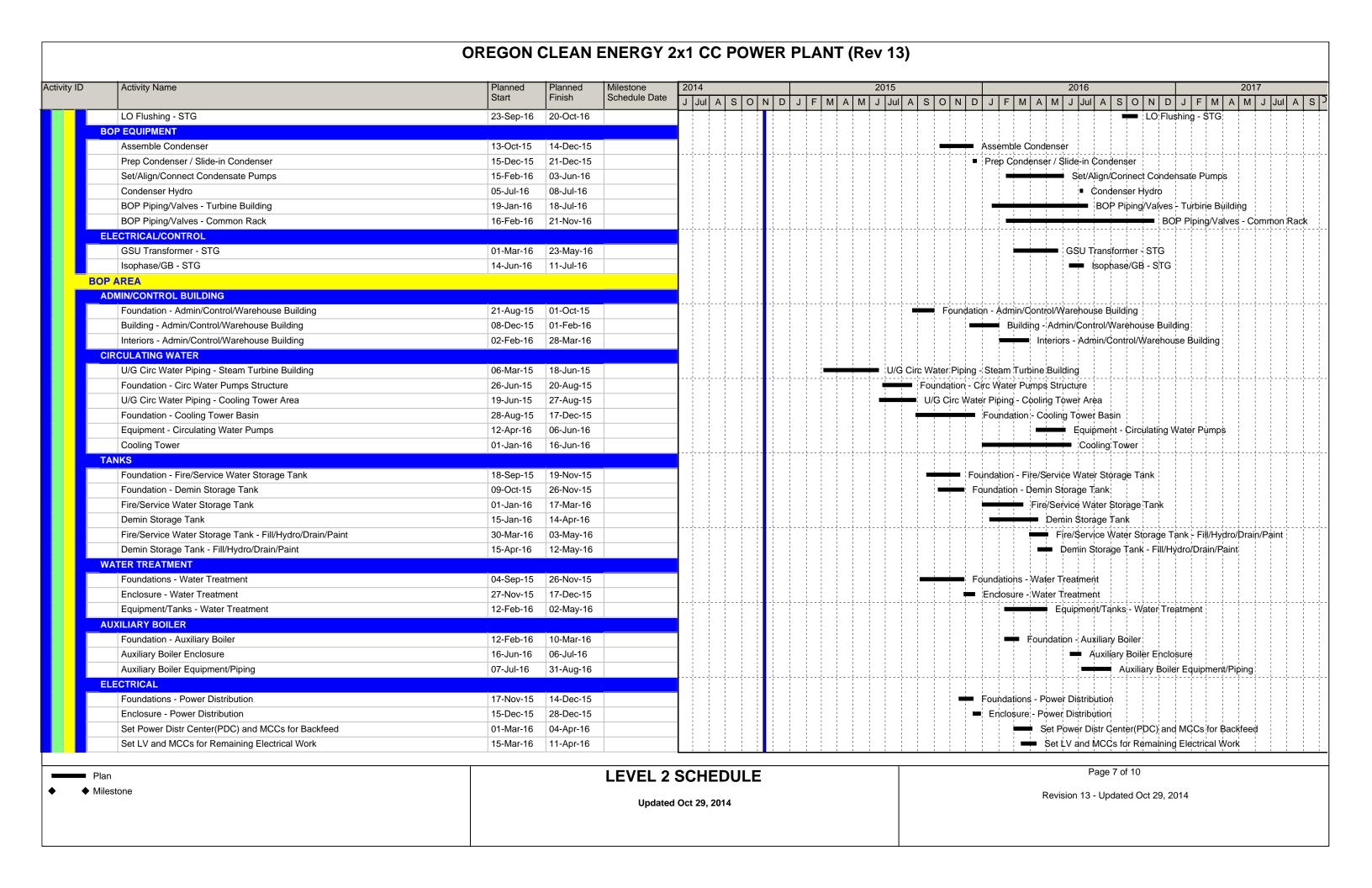












Activity Name		Planned	Planned	Milestone	2014					2015	5						2016					2	2017
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	lectrical Work Admin Building		02-May-16												-	- : :	quipmen	- : :	1 1	- 1 1	rk Adm	in Buildi	ng
Interconnection - D	CS	03-May-16	19-May-16														Intercon	nection	- DCS	3			
COMMISSIONING																							
SYSTEM CHECKOUT/C	OMMISSIONING									ļļ			<u> </u>						ļļ				
CTG #1			,									1											
Checkout - CTG #1		18-Jul-16	19-Aug-16		1													- Che	1 1	1 1	1 1		
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Commission to FSN		05-Sep-16										į							1 1		: :	FSNL -	1 1
Commission/Tuning	g - CTG #1	31-Oct-16	20-Jan-17																¦		■ ¦Coh	nmission 	/Tuning
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CTG #2 On Turning			07-Oct-16		-							1							i i	1 1	1 1	ng Gear	OTO !!
Commission to FSN			04-Nov-16		-																1 1		CTG #
Commission/Tuning	j - CTG #2	07-Nov-16	27-Jan-17																-	1 1	Co	mmissip	n/Tuning
HRSG #2 Checkout - HRSG #	40	07-Oct-16	20-Oct-16									1								heckou	+ LIDS	C #2	
Commission - HRS			03-Nov-16																1 1			G #2 HRSG #	
STG	G #2	21-001-16	03-N0V-16																1	Commi	SSION	HROG!#	FZ
STG On Turning G	oor.	21-Oct-16	21-Oct-16																	TG On	Turnin	Gnar	
STG Checkout	501		11-Nov-16		-							1							1 1	STG	1 1	1 1	
Commission - STG			09-Dec-16		-														: :			on - ST	2
BOP - MECHANICAL		14-1107-10	09-Dec-10																	7	////////////		
FIRE PROTECTION																							
Checkout - Fire Wa	ter	30-Mar-16	12-Anr-16		•											Chec	ckout - F	ire Wate	er				
Pre-Operation - Fire			10-May-16		-							1			1 [	i i	re-Oper	i i	i i	ater			
Commission - Fire		· · · · · · · · · · · · · · · · · · ·	17-May-16		-											- ; ;	Commis	- : :	1 1	- 1			
SERVICE WATER	Tato.	Trimay 10	11 May 10			·																	
Checkout - Service	Water	04-May-16	17-May-16									1					Checko	ıt - Serv	vice W	ater			1 1
Pre-Operation - Se			24-May-16		-							į			1 1	!!!	Pre-Op	!!!	!!!		er		
Commission - Serv		· · · · · · · · · · · · · · · · · · ·	31-May-16		-							-				1 1	Comm	1 1	1 1	1 1	1 1		
WATER PRE-TREAT		zo may 10	or may re									!											
Checkout - Water F		28-Jun-16	04-Jul-16							<del></del>							- C	neckout	t - Wat	er Pre-	Freatm	ent	
Pre-Operation - Wa		05-Jul-16	18-Jul-16		1							1 1 1	1 1				i i	i i	i i	i i	1 1	reatmen	ıt
Commission - Water			15-Sep-16		1							i !						1 1	! !	1 1	1 1	Pre-Tre	1 1
WATER TREATMEN						<b>   </b>						1											
Checkout - Water T		03-May-16	30-May-16					1 1				 	1 1				Check	out - Wa	ater Tr	eatmer	nt		
Pre-Operation - Wa		31-May-16			<del> </del>	·			<del> </del> !	ļ <del>-</del>			y <u>i</u>				Pre-	J J	11	L L .			· ‡ ‡ ·
Commission - Water		21-Jun-16										1	1 1				1 1	ommiss	1 1	1 1	1 1	1 1	1 1
DEMIN TRANSFER												1											
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■ Plan				LEVEL 2	SCHED	ULE											Pa	age 8 of	т 10				
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· ID	Activity Name	Planned	Planned	Milestone	2014			2015	5	2016	2017
		Start	Finish	Schedule Date	J Jul A	s o	N D	J F M A M J J	ul A S O N D	J F M A M J Jul A S O	N D J F M A M J Jul A
	Checkout - Demin Water Transfer	13-May-16	16-May-16							■ Checkout - Demin	Water Transfer
	Pre-Operation - Demin Water Transfer	26-Jul-16	01-Aug-16							. Pre-Ope	ation - Demin Water Transfer
	Commission - Demin Water Transfer	02-Aug-16	08-Aug-16							<b>■</b> Commis	sion - Demin Water Transfer
	CLOSED CYCLE WATER										
	Pre-Operation - Closed Cycle Cooling Water	09-Aug-16	22-Aug-16							■ Pre-O	peration - Closed Cycle Cooling Water
	Commission - Closed Cycle Cooling Water	23-Aug-16	05-Sep-16							<b>坤</b> Con	mission - Closed Cycle Cooling Water
	COOLING TOWER MAKEUP										
	Checkout - Cooling Tower Makeup	29-Jul-16	25-Aug-16							Chec	kout - Cooling Tower Makeup
	Pre-Operation - Cooling Tower Makeup	07-Oct-16	13-Oct-16							•	Pre-Operation - Cooling Tower Makeu
	Commission - Cooling Tower Makeup	14-Oct-16	27-Oct-16							-	Commission - Cooling Tower Makeu
	CIRCULATING WATER										
	Checkout - Circulating Water	17-May-16	13-Jun-16							Checkout - Circ	ulating Water
	Pre-Operation - Circulating Water	28-Jun-16	08-Aug-16							Pre-Ope	eration - Circulating Water
	Commission - Circulating Water	09-Aug-16	12-Sep-16							<b>—</b> Co	mmission - Circulating Water
	CONDENSATE										
	Checkout - Condensate	26-Aug-16	15-Sep-16							<b>—</b> Ch	eckout - Condensate
	Pre-Operation - Condensate		22-Sep-16		1						e-Operation - Condensate
	Commission - Condensate	23-Sep-16									Commission - Condensate
	BOILER FEED										
	Checkout - Boiler Feed Water	26-Aug-16	16-Sep-16		•					<b>→</b> Ch	eckout - Boiler Feed Water
	Pre-Operation - Boiler Feed Water	-	26-Sep-16								re-Operation - Boiler Feed Water
	Commission - Boiler Feed Water	27-Sep-16	-		1						Commission - Boiler Feed Water
	AUXILIARY BOILER	2. 665 16	10 001 10								
	Checkout - Auxiliary Boiler	01-Sep-16	21-Sen-16		•						neckout - Auxiliary Boiler
	Pre-Operation - Auxiliary Boiler	22-Sep-16									re-Operation - Auxiliary Boiler
	Commission - Auxiliary Boiler	29-Sep-16			1						Commission - Auxiliary Boiler
	SOP - ELECTRICAL/CONTROL	29-3ер-10	20-001-10				1 1				Cultilission - Auxiliary Boller
۔	MV/LV POWER										
	<del>-</del> .	02 May 40	20 May 40							Checkout - MV P	
	Checkout - MV Power		30-May-16		-						
	Checkout - LV Power	·	06-Jun-16							Checkout - LV F	
	Energize - MV Power	21-Jun-16			1					■ Energize - M	
	Energize - LV Power	05-Jul-16	05-Jul-16							■ Energize - L	v Power
	DCS	00 M	00.14								
	Checkout - DCS		26-May-16							■ Checkout - DCS	
	Commission - DCS for Backfeed	27-May-16	30-May-16							■ Commission - D0	S for Backfeed
	CT #1 GSU	1,,,,									
	Checkout - CTG #1 GSU/GB		18-May-16							■ Checkout - CTG #	. ; ; ; ; ; ; ; ; ;
	Energize - CTG #1 GSU/GB	16-Jun-16	16-Jun-16							■ Energize - CT0	G#1 GSU/GB
	CT#2 GSU										
	Checkout - CTG #2 GSU/GB		30-May-16							■ Checkout - CTG	
	Energize - CTG #2 GSU/GB	17-Jun-16	17-Jun-16							ı Energize - CT0	G#2 GSU/GB
	_STG GSU		,								
	Checkout - STG GSU/GB	30-Aug-16	05-Sep-16								ckout - STG GSU/GB
					001155	\\ \\ \			1	Page 9 of 10	
Pla				LEVEL 2	SCHEL	JULE			-		
<b>▼</b> Mil	estone			Undeter	l Oct 29, 201					Revision 13 - Updated 0	Oct 29, 2014

		OREGON (	CLEAN	ENERGY 2	2x1 CC POWE	R PLANT (Rev 13)		
Activity ID	Activity Name	Planned	Planned	Milestone	2014	2015	2016	2017
		Start	Finish	Schedule Date	J Jul A S O N	D	J   F   M   A   M   J   Jul   A   S   O   N   D	J   F   M   A   M   J   Jul   A   S   <sup>2</sup>
	Energize - STG GSU/GB	20-Sep-16	20-Sep-16				■ Energize -	STG G\$U/GB
PLAN	T COMMISSIONING							
Z-f	Energize Auxiliary Power	20-Jun-16	20-Jun-16				r Energize Auxiliary Pow	er
Z-f	Initial Firing FSNL CTG #1	31-Oct-16	31-Oct-16				Initial Initial	Firing FSNL CTG #1
Z-f	Synch CTG #1	01-Nov-16	01-Nov-16				Sýnc	CTG #1
Z-f	Steam Blows #1	01-Nov-16	07-Nov-16				■ Stea	m Blows #1
Z-f	Initial Firing FSNL CTG #2	07-Nov-16	07-Nov-16		1 : : : : : : : : : : : : : : : : : : :		ı Initia	Firing FSNL CTG #2
Z-f	Synch CTG #2	08-Nov-16	08-Nov-16				J• \$yne	th CTG #2
Z-f	Steam Blows #2 and Common	08-Nov-16	21-Nov-16				■ Ste	am Blows #2 and Common
Z-f	Steam Blow Restoration/SCR Catalyst Outage	22-Nov-16	05-Dec-16				<b>=</b> 5	steam Blow Restoration/SCR Catalys
Z-f	Bypass Operation	06-Dec-16	09-Dec-16					Bypass Operation
Z-f	Synch STG	12-Dec-16	12-Dec-16		1 : : : : : : : : : : : : : : : : : : :			\$yn¢h STG
Z-f	STG Initial Roll to Base Load	12-Dec-16	23-Dec-16				-	STG Initial Roll to Base Load
Z-f	Load Testing	26-Dec-16	03-Feb-17		1			Load Testing
Z-f	Screen Outage	06-Feb-17	17-Feb-17					■ Screen Outage
Z-f	Plant Optimization	06-Dec-16	17-Feb-17					Plant Optimization
Z-f	Performance Testing	20-Feb-17	24-Feb-17		<b>1</b>			■ Performance Testing
Z-f	Reliabilty Test	27-Feb-17	03-Mar-17					■ Reliabilty Test

This foregoing document was electronically filed with the Public Utilities

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in

Case No(s). 12-2959-EL-BGN, 14-1396-EL-BGA

Summary: Correspondence of Oregon Clean Energy, LLC electronically filed by Teresa Orahood on behalf of Sally Bloomfield